July 25, 2011

RE: IB Docket 11-109 and IB Docket File No. SATMOD2010111800239

MAPPS, the only national association exclusively comprised of private sector geospatial firms, appreciates this opportunity to comment on the LightSquared application.

Formed in 1982, MAPPS (www.mapps.org) is the only national association exclusively comprised of private firms in the remote sensing, spatial data and geographic information systems field in the United States. The MAPPS membership spans the entire spectrum of the geospatial community, including Member Firms engaged in satellite and airborne remote sensing, surveying, photogrammetry, aerial photography, mobile mapping, LIDAR, building information models (BIM), 3D mapping, hydrography, bathymetry, charting, aerial and satellite image processing, GPS, and GIS data collection and conversion services. MAPPS also includes Associate Member Firms, which are companies that provide hardware, software, products and services to the geospatial profession in the United States and other firms from around the world. Independent Consultant Members are sole proprietors engaged in consulting in or to the geospatial profession, or provides a consulting service of interest to the geospatial profession.

MAPPS provides its 180+ member firms opportunities for networking and developing business-to-business relationships, information sharing, education, public policy advocacy, market growth, and professional development and image enhancement.

When the FCC on January 26, 2011 granted a conditional waiver to LightSquared to operate a high power ground-based broadband service in the space radiofrequency band next to GPS operations, it also required a technical Working Group to study the potential harmful interference from LightSquared's terrestrial transmissions to GPS users. MAPPS commented to the FCC on February 7, 2011 http://www.mapps.org/issues/MAPPS_FCC_Lightsquared.pdf.

The final report of this Working Group shows significant harmful interference to a broad range of GPS applications, including: mapping, geographic information systems (GIS) and surveying. As well as other engineering, resource, law enforcement, consumer, navigation, emergency response, aviation, and scientific applications – all of which negatively impact the geospatial community.

If GPS is not fully available, in a clear, consistent and unencumbered manner, the impact MAPPS members and the clients we serve will be extremely significant, and costly. Current, accurate geospatial information clients have come to expect to be readily available would become extremely and unnecessarily expensive to collect and the time it would take to collect such data through non-GPS means would make much data obsolete by the time it becomes available to the client.

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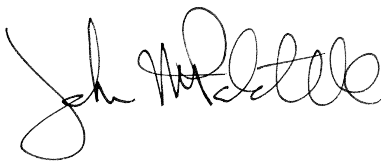
This will not only drive up consumer costs at a time when the economy is already functioning at historic lows, but inasmuch as government agencies (Federal, state and local) are a major user of our members' data, products and services, the cost of government programs will increase significantly – at a time when the federal government is running a $1.4 billion annual deficit and a $14 trillion cumulative debt, which will add to the budgetary challenges states and localities are facing.

The Working Group's team on High Precision, Networks, and Timing found there would be harmful interference with high precision GPS receivers – particularly those used in aviation and geospatial. As a community that not only conducts surveys using GPS, but also flies satellites and aircraft to collect imagery and other airborne and spaceborne sensing equipment, MAPPS members are significantly impacted by this interference. The LightSquared original rollout configuration plan caused harmful interference to these receivers beyond 2 km from each tower. In the LightSquared recommendation to use the lower 10 MHz channel, harmful interference is observed at 1.2 km from each tower, with complete loss of high accuracy positioning within one-half mile of any tower. When considering typical cell tower spacing, a mobile GPS geospatial user operating in an urban area covered by LightSquared terrestrial operations would potentially be within a quarter- to a halfmile from a tower. This means that harmful interference could be expected to blanket large areas of the U.S., including under the lower 10 MHz only proposed terrestrial broadband operations.

Adding to the cost of data collection through utilization of alterative technologies, methodologies and procedures to avoid LightSquared interference with GPS is not a viable option for the geospatial community. Given the hundreds of millions of dollars in GPS-enabled or dependent equipment, receivers and devices that geospatial firms have already purchased and paid for, approving a LightSquared application that would result in all such existing equipment, receivers and devices needing to be retrofitted would be an unreasonable, expensive and impractical consequence for geospatial firms.

MAPPS respectfully urges that the FCC deny any LightSquared application, unless and until, accepted and unequivocal engineering tests are submitted that demonstrate such system can operate with no interference with high precision GPS.

Sincerely,



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